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JOHN A SMART
708 BLOSSOM HILL RD
SUITE 201
LOS GATOS CA 95032

LM41/1014

EXAMINER

CHANNAVAJJALA, S

ART UNIT

PAPER NUMBER

2777

DATE MAILED: 10/14/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
08/923,612

Applicant(s)
Sethuraman Suresh et al.,

Examiner
Srirama Channavajjala

Group Art Unit
2777



☒ Responsive to communication(s) filed on Aug 9, 1999

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-25 and 27-30 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-25 and 27-30 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Response to Amendment

1. Examiner acknowledges receipt of Applicant's response to the previous Office action, received August 09, 1999.
2. Claims 1-25, 27-30 are remain pending in this application.
3. Claim 26 is canceled.
4. Examiner acknowledges PTO-1449, paper no. #5-6.
5. The text of those sections of Title 35, U.S. Code not included in this office action, however, can be found in a prior office action.
6. Applicant's arguments with respect to Claims 1-25, 27-30 have been fully considered but they are not deemed to be persuasive. For the examiner's response to the Applicant's arguments, see the discussion below.

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Information Disclosure Statement

7. The references listed in the Information Disclosure Statement paper no. 5-6 are exactly same, however, examiner notes that in the paper no. 6 , US Patent "5,694,990" should be US Patent "5,684,990" [typographical error], therefore, PTO-1449, paper no. # 5 has been considered, paper no. # 6 treated as "duplicate" PTO-1449 copy.

Appropriate correction required.

8. This application contains of a computer program listing of more than ten (10) , in the specification **pages, 22-39**. In accordance with 37 CFR 1.96(c), a computer program listing contained on more than ten (10) pages, **must** be submitted as a "**microfiche appendix**" conforming to the standards set forth in 37 CFR 1.96(c)(2) and must be appropriately referenced in the specification (see 37 CFR 1.77(a)(6)). Accordingly, applicant is required to cancel the computer program listing appearing in the current appendix to the specification, file a "**microfiche appendix**" in compliance with 37 CFR 1.96(c), and insert an appropriate reference to the newly added "**microfiche appendix**" at the beginning of the specification.

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Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kucala, US Patent No.5727202, further in view of Olds et al., [hereafter Olds], US Patent No. 5832487.

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11. As to Claim 1, Kucala teaches a system which including 'a system providing one dataset in communication with another dataset, a method for synchronizing datasets' [col 1, line 8-10], 'receiving a request specifying synchronization of information records of a source dataset with information records of a target dataset' [fig 1, col 2, line 66-67, col 3, line 1-9], examiner interpreting source dataset to be equivalent to Kucala's fig 1, element 101, target dataset to be equivalent to Kucala's fig 1, element 201, 'determining which, if any, information records have been previously transmitted to the target dataset but no longer exists at the source dataset' [col 3, line 6-9, line 35-53], 'determining which, if any, information records have been added to or modified at the source dataset since the source dataset was last synchronized with the target dataset' [col 3, line 6-9, line 35-63], 'synchronizing information records of the source dataset with information records of the target dataset' [col 3, line 54-63]. Kucala does not teach 'source dataset is assigned a globally unique identifier that is independent of either of the devices for identifying said each information record at both source dataset and the target dataset', 'globally unique identifier being maintained', globally unique identifier to be traced back to a specific information record regardless of which device the specific information record resides', 'globally unique identifiers, deleting from the target dataset any information records which have been previously transmitted to the target dataset but no longer exist at the source dataset', 'using said globally unique identifiers, updating the target dataset so that said target dataset includes those information records determined to have added to or modified at the source dataset since the source dataset was last synchronized with the target dataset'. Olds teaches a system which

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including 'source dataset' [col 3, line 20-24], examiner interpreting source dataset to be equivalent to Olds's file servers, element 16, 'source dataset is assigned a globally unique identifier that is independent of either of the devices for identifying said each information record at both source dataset and the target dataset'[col 3, line 25-30, col , col 6, line 64-67], 'at both source dataset and the target dataset'[col 3, line 42-45], examiner interpreting target dataset to be equivalent to Olds's Clients, element 20, 'globally unique identifier being maintained' [col 8, line 17-19], globally unique identifier to be traced back to a specific information record regardless of which device the specific information record resides'[col 8, line 24-34] 'globally unique identifiers' [col 3, line 54-57], deleting from the target dataset any information records which have been previously transmitted to the target dataset but no longer exist at the source dataset'[col 10, line 7-14, line 19-28], 'using said globally unique identifiers, updating the target dataset so that said target dataset includes those information records determined to have added to or modified at the source dataset since the source dataset was last synchronized with the target dataset'[col 10, line 15-28].

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the concepts taught by Olds with the system of Kucala because globally unique identifiers allows to identify particular dataset or record to be update or modify, such an identifier is unique because it also contains a time stamp, eliminates duplicate records, chances of confusion over a conflict are greatly reduced, save time in later accesses or reorganization of that datasets or records, thus improving the reliability and versatility of the system.

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12. As to Claim 2, Kucala teaches a system which including 'database table having a plurality of data records' [col 2, line 60-65].

13. As to Claim 3, Kucala teaches a system which including 'each dataset comprises an electronic address book listing contact information' [col 2, line 63-65].

14. As to Claim 4, Kucala teaches a system which including 'electronic schedule listing scheduling information' [col 2, line 60-61], examiner interpreting electronic schedule listing to be equivalent to Kucala's calendar files or to-do list.

15. As to Claim 5, Olds teaches a system which including 'globally unique identifiers are created by the system' [col 2, line 45-47].

16. As to Claim 6, Olds teaches a system which including 'globally unique identifiers are maintained in a record map stored apart from the source dataset' [col 2, line 45-47, col 6, line 32-39, fig 4].

17. As to Claim 7, Olds teaches a system which including 'globally unique identifier for each record comprises a timestamp' [col 2, line 47-51].

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18. As to Claim 8, Olds does not detail a system which including 'each globally unique identifier is a 32-bit', although Olds details fixed length globally unique identifier' [col 2, line 47-51].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use 32-bit globally unique identifier because one of skill in the art would realize the need to synchronizing of data files or data sets to the appropriate data files or data sets in the source/target, thus improving the versatility of the system.

19. As to Claim 9, Kucala teaches a system which including 'synchronizing the information records of the target dataset with information records of the source dataset by designating the source dataset as the target dataset, designating the target dataset as the source dataset, and repeating said determining step and said synchronizing step' [col 3, line 10-19].

20. As to Claim 10, Kucala teaches a system which including 'synchronization set comprises a delete order specifying particular information records to delete at the target dataset' [col 3, line 54-63].

21. As to Claim 11, Olds details a system which including 'delete order includes a list of globally unique identifiers for particular information records to delete at the target dataset' [col 9, line 45-49, col 10, line 12-14].

22. As to Claim 12, Kucala teaches a system which including 'synchronization set comprises an extraction record specifying particular information to add to or modify at the target dataset' [col 1, line 32-40].

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23. As to Claim 13, Olds teaches a system which including 'extraction record includes at least one globally unique identifier together with field information for the particular information to add to or modify at the target dataset' [col 4, line 12-15].

24. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kucala, US Patent No. 5727202, Olds et al., [hereafter Olds], US Patent No. 5832487 as applied to claim 1 above, and further in view of Buchanan, US Patent No. 5758355.

25. As to Claim 14, Kucala, and Olds do not teach 'excluding certain information records from participating in synchronization by applying a user-defined filter'. Buchanan details a system which including 'synchronization by applying a user-defined filter' [col 13, line 65-67, col 14, line 1-8], examiner interpreting user-defined filter to be equivalent to Buchanan's SQL or structure query language.

It would have been obvious to one of ordinary skill in the art the time of the applicant's invention to combine the concepts taught by Buchanan with the system of Kucala and Olds because, excluding certain records or files allows synchronization faster, thus improves the responsiveness of the system.

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26. As to Claim 15, Buchanan details a system which including 'user-defined filter comprises an outbound filter applied to information records prior to creation of the synchronization set' [col 17, line 49-67], examiner interpreting outbound filter to be equivalent to delete operation.

27. As to Claim 16, Buchanan details a system which including 'user-defined filter comprises an inbound filter applied to information records after creation of the synchronization set' [col 13, line 46-58, col 17, line 49-67], examiner interpreting inbound filter to be equivalent to add or update operation.

28. As to Claim 17, Buchanan details a system which including 'user-defined filter comprises a user-supplied filtering routine supplying filtering logic' [col 13, line 2-8], examiner interpreting filtering logic to be equivalent to SQL statements.

29. As to Claim 18, Olds details a system which including 'target dataset resides at a remote location relative to the source dataset' [col 5, line 22-30, line 35-40].

30. As to Claim 19, Kucala details a system which including 'after creating the synchronization set, transmitting said synchronization set to said remote location' [col 2, line 66-67, col 3, line 1-7].

31. As to Claim 20, Olds details a system which including 'electronic Messaging communication protocol' [col 5, line 6-21].

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32. Claims 21-25, 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyering, US Patent No. 5729735, and further in view of Olds, US Patent No. 5832487.

33. As to Claim 21, Meyering teaches a system which including 'connecting a first device having a first dataset to a second device having a second dataset' [fig 3], examiner interpreting first device to be equivalent to Meyering's master computer, element 102, first dataset to be equivalent to Meyering's master file, element 116, second device to be equivalent to Meyering's portable computer, element 128, second dataset to be equivalent to Meyering's remote file, element 134, 'determining information of said first and second datasets which requires synchronization' [col 4, line 61-67, col 5, line 1-5], 'determining for each dataset information which has been previously received from the other dataset but which no longer exists at the other dataset' [col 5, line 6-15], 'determining for each dataset information which has been added or modified at the other dataset since the other dataset was last synchronized with said each dataset' [col 5, line 16-30, fig 5A-5C], 'responsive to said determining means, for synchronizing said first and second datasets' [col 5, line 59-67, col 6, line 1-19], however, Meyering does not teach 'assigning to each data record a globally unique identifier'. Olds teaches a system which including 'assigning to each data record a globally unique identifier'[col 2, line 45-46].

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34. As to Claim 22, Meyering teaches a system which including 'at least one of said devices is a handheld computing device' [col 1, line 66-67, col 2, line 1-2], examiner interpreting handheld computing device to be equivalent to Meyering's portable computer, fig 2, element 128.

35. As to Claim 23, Meyering teaches a system which including 'at least one of said devices is desktop computing device' [fig 2, col 3, line 47-53], examiner interpreting desktop computer device to be equivalent to master computer, fig 3, element 102.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the concepts taught by Olds with the system of Meyering because globally unique identifiers allows to identify particular dataset or record to be update or modify, such an identifier is unique because it also contains a time stamp, eliminates duplicate records, chances of confusion over a conflict are greatly reduced, save time in later accesses or reorganization of that datasets or records, thus improving the reliability and versatility of the system.

36. As to Claim 24, Meyering does not specifically teaches a system which including 'transmission control protocol/Internet protocol (TCP/IP) connection', although Meyering teaches communication link [col 3, line 57-63, fig 1, element 126], however, Olds teaches a system which including 'transmission control protocol/Internet protocol (TCP/IP) connection' [col 5, line 17-21].

37. As to Claim 25, Meyering teaches a system which including 'synchronizing operates to provide bi-directional synchronization of the datasets' [fig 4, col 3, line 38-40].

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38. As to Claims 27-29, Meyering teaches a system which including 'filter means for selectively blocking synchronization of certain types of information' [col 4, line 35-50].

39. As to Claim 30, Olds teaches a system which including 'electronic mail transport means for enabling synchronization of remote datasets' [col 6, line 49-53], examiner interpreting electronic mail is part of Olds network element 10's Internet or intranet.

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Response to Arguments

40. Applicant's arguments filed on August 09, 1999 have been fully considered but they are not persuasive.
41. In the remarks applicant argues the following: (a) In page 8, line 5-6, the examiner purposefully did not include claim 26 in the rejection, (b) In page 11, line 1-2, Applicant's claimed invention does not seek to replace globally unique identifiers or GUIDs with an alternative identifier such as Old's tuned names, (c) In page 12, line 14-17, Even if the examiner interprets the filter limitation to be equivalent to selection criteria in a database query (e.g., SQL predicate), the Buchanan reference still fails to teach or suggest specific application of such a filter in relation to creation of a synchronization set.
42. As to argument (a), Examiner rejected claim 26 in page 11 of paper no. # 4, also, see page 12, line 21-26, paper no. # 8.
43. As to the argument (b) Old teaches GUID being used as database wide object identifiers [see Abstract, see fig 5, element 114], although Old teaches alternative identifier such as Old's "tuned names", using GUIDs are well known in the art for example given in the background of the Old's invention [see col 2, line 45-51].
44. As to the argument (c), Buchanan teaches for example RDBMS distribution data structure [see fig 1, col 4, line 24-33], because it is RDBMS, it is inherent to use any SQL or database query, also Buchanan teaches synchronization process [see fig 1, col 4, line 36-39, col 5, line 5-9].

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45. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is (703)308-8538. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anton Fetting, can be reached on (703)305-8449. The fax phone number for this Art Unit is (703)308-5403.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)305-9600.

CS

October 13, 1999


ANTON W. FETTING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700